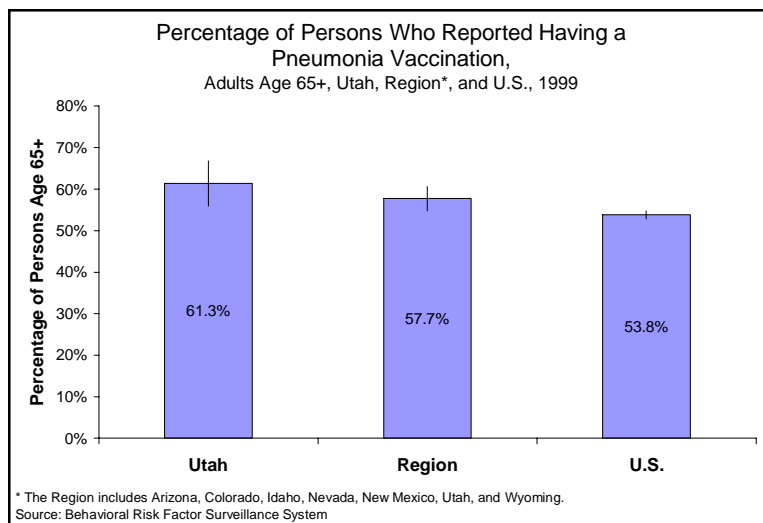


Pneumococcal Vaccination

Question: *Have you ever had a pneumonia vaccination?*

Infections due to *Streptococcus pneumoniae* are a major cause of hospitalization and death in the U.S. Nationally, pneumococcal pneumonia alone has been estimated to cost up to eighteen billion dollars per year and up to 40,000 deaths per year have been attributed to pneumococcal disease.^{vii} It has been estimated that approximately half of all deaths from pneumococcal disease in the U.S. could be prevented by use of the vaccine.^{viii} The Institute of Medicine Committee on Using Performance Monitoring to Improve Community Health proposed that the proportion of adults aged 65 or older who have ever been immunized for pneumococcal pneumonia be included as one of 25 Community Health Profile indicators.



- In Utah, the estimated percentage of persons age 65 or over who reported ever having a pneumonia vaccination increased substantially from 35.7% in 1993 to 61.3% in 1999.
- The percentage of persons age 65 or over who reported ever having a pneumonia vaccination increased in the Region and U.S. from 1993 to 1999. The Region was also significant for a non-linear trend which indicates a leveling off between 1997 and 1999.
- In 1999, the estimated percentage of persons age 65 or over in Utah who reported ever having a pneumonia vaccination was not different than that for the Region, but was significantly greater than that for the U.S.
- Utah reached the Healthy People 2000 objective of 60% for percentage of persons 65 years or over who have ever received a pneumococcal vaccination.

Utah Objective: By 2010, increase immunization levels to 60% for pneumococcal and influenza vaccines among adults age 50 and over.

HP2000 Goal 20.11: Increase immunization levels as follows: Pneumococcal pneumonia and influenza immunization among noninstitutionalized people 65 years and older to at least 60%.

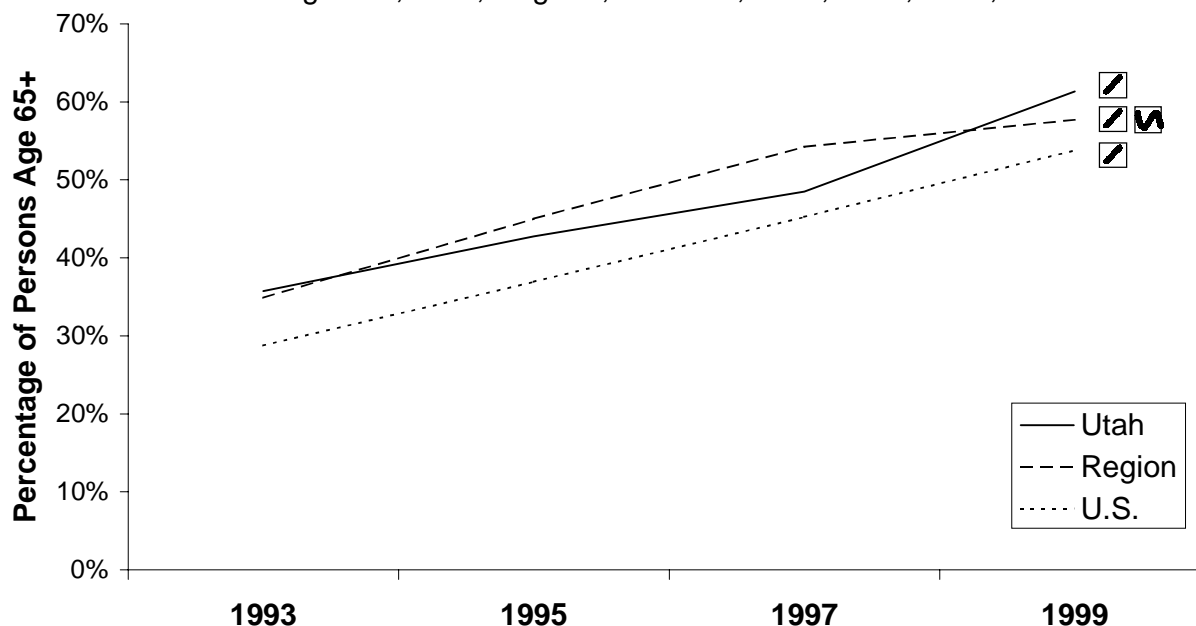
HP2010 Goal 14-29: Increase the proportion of adults who are ever vaccinated annually against influenza and ever vaccinated against pneumococcal disease to 90% for non-institutionalized adults aged 65 years and older.

CDI 66: Pneumococcal vaccination among older adults (percent of respondents age 65 years or older who report having ever received a pneumococcal vaccination).

CHSI: Pneumonia vaccine among adults 65+, ever.

Pneumococcal Vaccination

Percentage of Persons Who Reported Having a
Pneumonia Vaccination,
Adults Age 65+, Utah, Region*, and U.S., 1993, 1995, 1997, 1999





* The Region includes Arizona, Colorado, Idaho, Nevada, New Mexico, Utah, and Wyoming.

Not all states participated in the BRFSS until 1994 (see Appendix A)

Source: Behavioral Risk Factor Surveillance System

Year	Utah			Region			U.S.		
	Percentage of Adults	95% Confidence Intervals		Percentage of Adults	95% Confidence Intervals		Percentage of Adults	95% Confidence Intervals	
	Age 65+	Lower	Upper	Age 65+	Lower	Upper	Age 65+	Lower	Upper
1993	35.7%	29.3%	42.1%	34.9%	31.9%	37.9%	28.7%	27.8%	29.7%
1995	42.7%	37.2%	48.3%	45.0%	42.2%	47.8%	36.9%	35.9%	38.0%
1997	48.5%	42.3%	54.8%	54.2%	51.3%	57.2%	45.3%	44.3%	46.2%
1999	61.3%	55.9%	66.7%	57.7%	54.8%	60.7%	53.8%	52.8%	54.8%

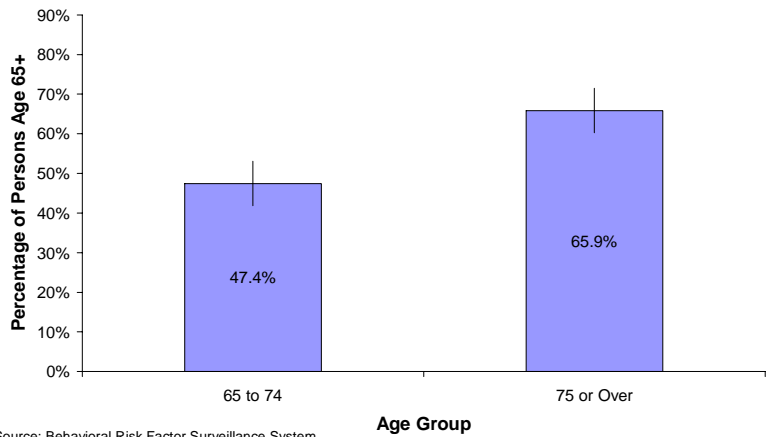
 upward linear trend

 non-linear trend

Pneumococcal Vaccination

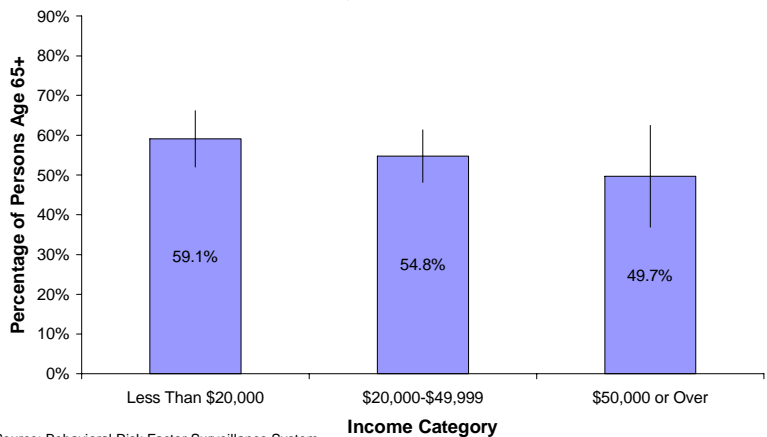
- Utah adults 75 years or over were more likely to report ever having a pneumococcal vaccination than those 65 through 74 years old. ($p < 0.0001$)

Percentage of Persons Who Reported Ever Having a Pneumonia Vaccination by Age, Utah Adults Age 65+, 1997 and 1999

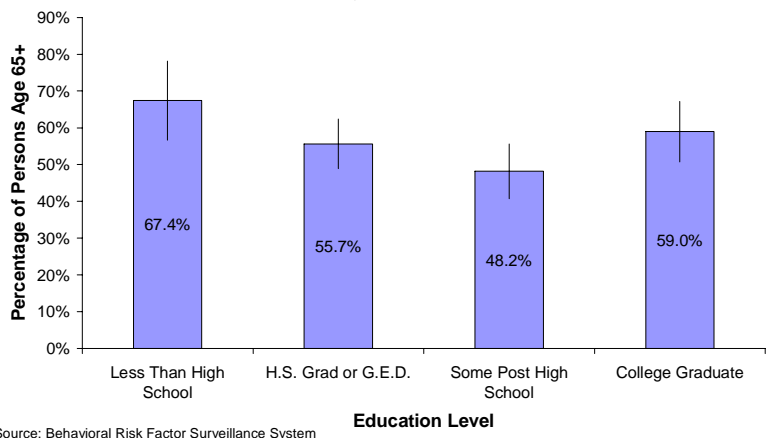


- Sample sizes for Utahns 65 years or over were too small to be able to say anything about differences between income, educational and ethnic subgroups in Utah in regards to pneumococcal vaccination.

Percentage of Persons Who Reported Ever Having a Pneumonia Vaccination by Income, Utah Adults Age 65+, 1997 and 1999



Percentage of Persons Who Reported Ever Having a Pneumonia Vaccination by Education, Utah Adults Age 65+, 1997 and 1999



Pneumococcal Vaccination

Percentage of Persons Who Reported Ever Having a Pneumonia Vaccination
by Selected Demographic Characteristics, Utah Adults Age 65+, 1997 & 1999.

			Survey Estimates of Respondents Age 65+ Who Reported Ever Having a Pneumonia Vaccination					
	Utah Population		Percentage of Adults Age 65+ Who Reported Ever Having a Pneumonia Vaccination			Number of Adults Age 65+ ^{1, 2}		Distribution of Adults Age 65+ Who Reported Ever Having a Pneumonia Vaccination by Category
Demographic Subgroup	Distribution	Number of Adults Age 65+ ¹						
Ever Had Pneumonia Vaccination			95% Confidence Intervals					
Yes	55.4%	98,400						
No	44.6%	79,400						
Total, Adults Age 65+	100.0%	177,800						
Sex								
Males	43.6%	77,600	52.7%	Lower	Upper	40,900	41.6%	
Females	56.4%	100,200	57.4%	46.0%	59.4%	57,500	58.4%	
Total, Adults Age 65+	100.0%	177,800	55.4%	52.3%	62.4%	98,400	100.0%	
Age Group								
65 to 74	56.8%	43,600	47.4%	51.3%	59.4%	20,700	29.0%	
75 or Over	43.2%	76,800	65.9%	41.9%	53.0%	50,600	71.0%	
Total, Adults Age 65+	100.0%	177,800	55.4%	60.3%	71.5%	98,400	100.0%	
Race								
White, Non-Hispanic	96.7%	171,900	55.6%	51.5%	59.8%	95,600	97.2%	
Hispanic	1.9%	3,300	51.9%	27.1%	76.7%	1,700	1.7%	
Non-White, Non-Hispanic	1.4%	2,500	42.4%	10.3%	74.5%	1,100	1.1%	
Total, Adults Age 65+	100.0%	177,800	55.4%	51.3%	59.4%	98,400	100.0%	
Income								
Less Than \$20,000	34.2%	60,800	59.1%	52.0%	66.2%	35,900	36.4%	
\$20,000-\$49,999	50.8%	90,300	54.8%	48.1%	61.4%	49,500	50.2%	
\$50,000 or Over	15.0%	26,700	49.7%	36.8%	62.5%	13,300	13.5%	
Total, Adults Age 65+	100.0%	177,800	55.4%	51.3%	59.4%	98,400	100.0%	
Education								
Less Than High School	10.8%	19,300	67.4%	56.7%	78.1%	13,000	13.2%	
H.S. Grad or G.E.D.	31.3%	55,600	55.7%	48.9%	62.4%	30,900	31.3%	
Some Post High School	31.5%	56,000	48.2%	40.8%	55.6%	27,000	27.4%	
College Graduate	26.4%	47,000	59.0%	50.7%	67.2%	27,700	28.1%	
Total, Adults Age 65+	100.0%	177,800	55.4%	51.3%	59.4%	98,400	100.0%	

1 Rounded to the nearest 100 persons.

2 Figures in these columns may not sum to the total because of missing values on the grouping variables.

Source: Utah Behavioral Risk Factor Surveillance System